TOPCOM®

Deskmaster

User Guide V2.0

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TOPCOM
Deskmaster

DECLARATION OF CONFORMITY

We, Topcom Europe Nv, Grauwmeer 17 , 3001 Heverlee , Belgium, declare that our product :

Product name: TOPCOM

Model type: 520 i

is in conformity with the essential requirements of the R&TTE directive 1999/5/EC and carries the **CE** mark accordingly.

Supplementary information:

The product complies with the requirements of:

Low Voltage Directive 73/23/EEC
EMC Directive 89/336/EEC

Date: 16/04/2003
Place: Heverlee , Belgium
Name: Verheyden Geert
Function: Technical Director

Signature:

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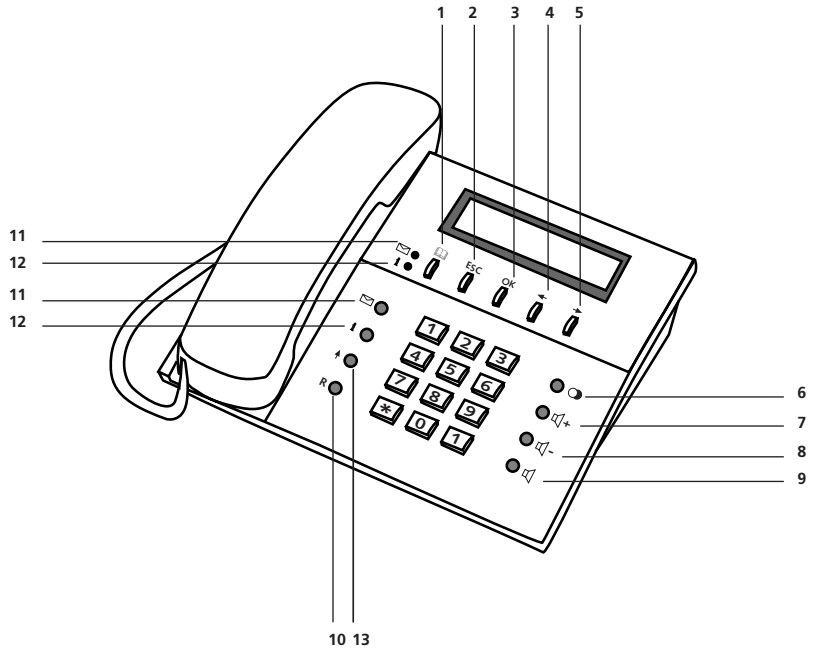


1 FUNCTION KEYS

1 Phonebook key
2 To quit an active function and return to the menu level above, to end a procedure started or a programming sequence.
3 Selection/confirmation of the menu item offered in the display.
4 To go to the previous available menu item.
Correction of an entry (last character).
5 To go to the next available menu item.
6 Last number redial key.
7 Increase loudspeaker volume.
8 Decrease loudspeaker volume.
9 Loudspeaker ON/OFF for Hands Free, Group Listening.
10 Hold Key: To hold call or to answer second call
11 List of unanswered calls. **LED** flashing = new call(s) stored.
12 Info key. **LED** flashing = feature programmed.
13 In idle state :
Function key. Direct function selection with 3 digit code of menu items.
In connected state :
Mute key. Will enable and disable the microphone(s) of the phone.

2 DISPLAY

1st Line

- In idle state, date and time will be displayed.
- During a connection, the number of the called party will be displayed.
- In case of a function selection, the main menu will be displayed.

2nd Line

- When programming, the selected function will be displayed. The function offered can be selected using the OK key. Additional submenus will be indicated by an arrow in the right corner of the line. Use the arrow keys assigned to the display to go to the right submenu.
- During a connection, the call charges will be shown in the right part of the display line, if available on your ISDN line.
- An up-arrow sign (↑) at the right side of the display line is the symbol for an activated So bus. This could be the analog port, the V.24 port or any other terminal connected to the So Bus being activated.
- The floppy disk sign (💾) at the right side of the display is the symbol for an activated B-channel for data via the V.24 interface.

3 GENERAL REMARKS

This handbook contains the necessary information for the operation of 3 types of ISDN telephones, all belonging to the Deskmaster family:

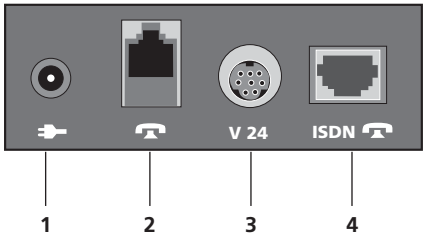
- Deskmaster 500i: Basic phone (without local interface ports);
- Deskmaster 510i: Phone with data port (V.24);
- Deskmaster 520i: Phone with data port and analog port (external adaptor included).

Information related to a particular version is indicated in the text, where applicable.

3.1 Connection

You connect the phone by plugging the connector of the phone line cord into one of the wall outlets of your ISDN access (S_0 Bus).

1 Mains Inlet (Deskmaster 520i only)
2 Analog extensions, AB port (Deskmaster 520i only)
3 V.24 port, PC COM port
4 ISDN line port



3.2 Place

For the placement of your phone, please ensure:

- Do not place the phone in an area where it may come into contact with water and chemicals.
- Plastic support pads of the phone:
  The equipment has been manufactured for usage in normal environments. Chemical influences from the area, in which you place the phone (chemicals used for the maintenance of furniture) may have an impact on the plastic pads.
  This may then result in unwanted damage to the furniture surface. In the environment of new or refreshed furniture, we therefore suggest you to place the phone on a nonskid mat (cloth etc.).
- Hands free speaking:
  The hands free facility enables communication with the handset on hook. Other persons in the room may then participate in the phone call.
  In order to achieve best hands free quality, please mind the following:
  The environment of the phone should not be covered by subjects such as piles of paper, coffee pots etc. It is suggested to ensure a free area of at least 15 cm at the front right part of the phone.

3.3 Security Notes

The ISDN Deskmaster has been manufactured in accordance with EN60950 :1992. The adaptor supplied with the analog port version is also in accordance with EN60950.
The plug may only be operated at 230V mains supply. Please verify that the isolation of the adaptor is neither damaged nor defective.

Attention: *During operation, dangerous voltages may be generated in the phone. Do not try to open the phone. The phone contains no parts, which could be repaired by the customer. The supplier does not assume any liability for usages outside the warranty and safety regulations.*

3.4 Cleaning

The phone can be cleaned without any problem. Please ensure the following:

- Wipe the phone with a damp cloth or use antistatic material.
- Never use a dry cloth for cleaning. (Static electricity may lead to electronic defects.)

Please take care that no liquid gets inside the equipment (switches and contacts may be damaged).

3.5 Disconnecting the Line Cord(s) from the Phone

- Press the lock towards the plug.
- Simultaneously pull the plug at the cord out of the telephone.

Note : *The same procedure is also applicable for the analog port cable.*

4 USER INTERFACE CONCEPT

4.1 Selecting the language

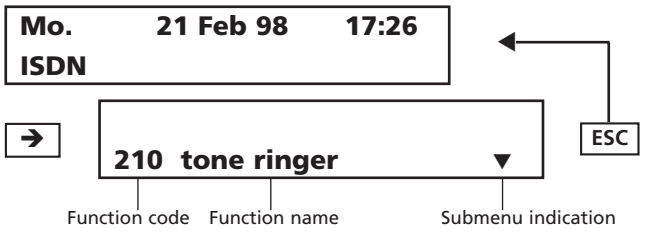
It is possible to set the display texts in different languages.

→	• Select the system parameter menu	**250 System param.**
OK		**System param.** **253 charge**
→...	• Select the language menu. The menu can be directly accessed using the shurtcut ↑261	**261 language**
OK	• Confirm to enter	**Language** **English**
← →	• Scrolling : You can now select the different languages	**Language** **French**
OK	• Press OK key to confirm	

4.2 Operation

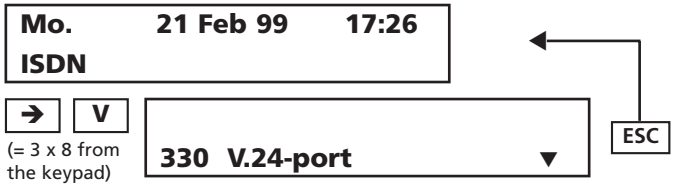
The ISDN Deskmaster implements a few mechanisms to simply control the phone:

- All information is displayed in the 2 lines by 20 characters display. In addition, 2 LEDs indicate the presence of unanswered calls (✉ sign) and programmed features (**i** sign).
  Below the display, 5 function keys are allocated to control the phone through the display guidance:
  - The "←" and "→" keys will navigate through the menu structure. Always one menu will be displayed at a time.
  - The „**OK**" key will select the function offered by the menu or open a submenu level, if available. A submenu is indicated by the "▼" sign immediately following the function name.
  - The „**ESC**" key will leave the current menu level or function without performing any commands and return to the previous level.
  - The key will provide direct access to the built-in phone book.



For users already familiar with the features of the phone, direct menu access mechanisms are provided:

- Each menu item (function) is displayed with a 3 digit function code in front of the function name (display of function codes can be switched off). The menu/function can be directly accessed by pressing the Function key "↑" (left side of the dialling keypad), followed by the function code required, entered from the dialling keypad: e.g.: [↑] [2] [1] [0]
- Another method to quickly access a menu is by searching the function by name. As all menus within a menu level are arranged in alphabetical order, they can be accessed by typing the first character of the function name required:



Note : *Sometimes, the information available for the display may be longer than a display line (e.g. UUS messages etc.). This will be indicated by arrow symbols (→) at the end of the display line. The remaining text can be viewed (horizonally scrolled) by holding longer than 3 seconds the right (or left) arrow key below the display.*

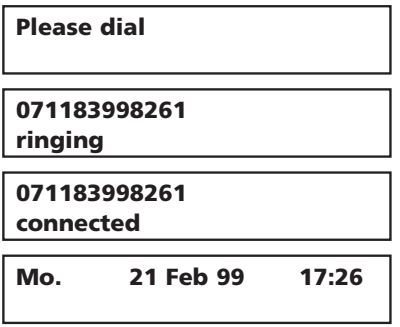
When the visual indicators (LEDs) for unanswered calls (✉ sign) or programmed feature information (**i** sign) are lit, the corresponding function keys (left to the dialling keypad) can be pressed to display the information. Any further action may then be completed using the menu control keys below the display as described above. The following sections describe the available functions and menus in more detail and explain you how to navigate through the menu system.

See Appendix "Menu/Function Overview" for a list of menus and functions.

5 ESTABLISHING A PHONE CALL

5.1 Outgoing Calls

- Lift handset (off hook). Wait for dial tone.
- Dial calling party number.
- Talking ....
- Replace handset (on hook).



The number dialed will remain stored for redialing.

5.2 Incoming Call

When you use different MSN numbers on an ISDN line you can program up to 3 MSN number inside the Deskmaster ISDN phone. When you get an incoming call, the Deskmaster will display on the upper-line of the display the number that is calling and on the second like the MSN number this person called. This allows the user of the Deskmaster to see what MSN number was called for example business call or private call.

- Idle state.

Mo. 21 Feb 99 17:26
ISDN

- Incoming Call

012536874556
For : 7582568

Note : *You can also program different ring tones for an incoming MSN number.*

5.3 Call Log

The information for up to 20 unanswered calls (e.g. during absence) will be stored. A LED (marked with an envelope) will indicate the presence of call log information. The information can be reviewed by pressing the function key with the same symbol.

5.4 Group Listening

During a call, the loudspeaker/hands free key may be pressed to switch ON the loudspeaker. Subsequent depression of the key will switch the loudspeaker OFF.

- Connection state.

071183998261
connected

- Loudspeaker ON.

071183998261
connected

- Loudspeaker OFF.

071183998261
connected

5.5 Hands Free Speaking

Using Hands free, you may communicate using the built-in microphone and loudspeaker, without lifting the handset.

- Press hands free key.
  Wait for dial tone.

Please dial

- Dial phone number.

071183998261
ringing

- Talking ...

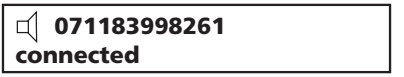
071183998261
connected

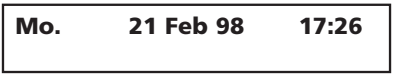
- Hands free OFF. Lift handset (off hook).

071183998261
connected

- Hands free ON again: Keep hands free pressed and replace handset on hook.

- End connection: Press hands free key.





Note : *With high background noise, no speech may be received. In this case it is better to use the handset, otherwise your calling partner might not understand you.*

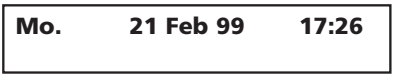
5.6 Preparatory Dialling

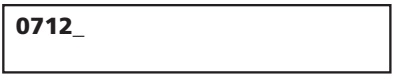
The called party number can be entered, before the handset goes off hook. This enables you to check and possibly change the phone number entered prior to transmission.

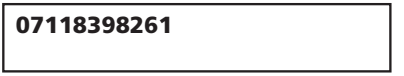
- Idle state.
- Dial phone number.

- Correction of number: Each depression of the key will delete the last character and place the cursor to new position.

- Change and continue dialling. Lift handset or press hands free key to start dialling.







5.7 Selection of outgoing MSN number before dialling

If you have entered different MSN numbers in the phone, the phone will always use MSN1 for dialling out. This MSN 1 will be send out with each outgoing call. If you want to use different MSN number:

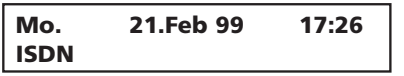
- Idle state
- Select the menu entry to Dial out

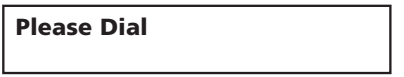
- Select the required MSN number

- Select the required MSN number

- The unit will take the line and you can start entering the telephone number

The unit will now send out the selected MSN number to the called number.





5.8 Special Dialling Procedure

The ISDN telephone supports special dialling procedures that can be used in the ISDN network for example : CUG (closed user groups) or SUB (subadressing).
The keys * and # are used to activate these functions :

- ***** + 4 digits = dialling with subadres
- **#** + 2 digits between 01 and 15 = closed user group
- **#*** + 2 digits between 01 and 15 = closed user group access

Example for CUG dialling :

- Dial number followed by # + 2 digits
- Lift handsets or press handsfree key to dial out

071183#02

Note :

Dialling with subadress or dialling into a closed user group always starts with a number followed by ******* *and/or* ***#*** *key and then the other digits.*

5.9 DTMF Dialling

During a connection, the keypad is available for DTMF signals, e.g. to control a distant answering machine. Depending on the key pressed, different tone frequences will be transmitted.

- Connection state.

07118398261
connected

- Enter the control codes from the dialling keypad (e.g. "1234")

071183982611234
connected

5.10 D Channel Signalling

The Deskmaster allows certain network functions by entering function codes. The system (PBX or network) will then respond by sending display messages to the phone or generating audible information. Function codes will always be entered from idle state. The sequence typically starts with the * character and ends with the # character. In between, a sequence of digits and characters may occur.

- Idle state.

Mo. 21.Feb 99 17:26
ISDN

- Dial keypad number.

***21*7128375#**

- Lift handset or press hands free key to start sending the D chanel info.

A Message from System

- System response

For the details of keypad codes available/required for your special system, please consult the documentation provided by your system supplier.

6 DIALLING WITH COMFORT

6.1 Last Number Redial

You can automatically redial the last manually dialed number, e.g. because the called subscriber was busy or did not answer the call.

- Handset offhook or hands free key pressed.

Please dial_

- Press redial key.

07118398261_
ringing

Note : *Last number redial is also possible during preparatory dialling. Memory numbers are not stored to the redial register and thus cannot be redialed using the last number redial feature.*

6.2 Extended Last Number Redial

The last 10 manually dialed phone numbers are stored in a redial list. With the phone in idle state, this list may be stepped through by subsequent depressions of the redial key. The entry displayed will be dialed when the handset goes off hook or the hands free key is pressed.

- Repeatedly press redial key until the desired entry is displayed.

07118398261_

- Lift handset or press hands free key.

07118398261
ringing

6.3 Dialling from the Phone Book

The phone includes a phone book with up to 100 entries. Each entry consists of a name (up to 20 characters) and a phone number. The phone number may contain subaddress and the information for a closed user group.

- Phone in idle state.
- RIGHT arrow to go to the menu. (Function code "290" will be displayed optionally.)

Mo. 21 Feb 99 17:26

290 Telephone book

- Select telephone book, 1st entry will be displayed.
  OR
  press the phone book key.

A_Company
0723198765

- SCROLLING: With each keystroke on the arrow keys, you can scroll the entries.

Topcom
07231396410

[A-Z] • SEARCHING: If a character is entered, the first entry starting with that character will be selected from the phone book and the cursor moves a step to the right. Entering the following characters, the search becomes more and more precise. Pressing the RIGHT arrow key will display the next entry and switch off the search function. Entry of characters will be through the dialling keypad. A single character assigned to a key will be selected by subsequent depression of the key with short intervals.
(See also "Programming the phone book".)

CHANGES:

• If the LEFT arrow key is pressed during search mode, the last entered character will be deleted (UNDO).

OK • The phone number displayed will be selected for preparatory dialling. This may be used to add dialling digits e.g. for dialling to an extension.

07231396410_

Notes : *Lifting the handset off hook or pressing the hands free key, the entry will be dialed directly from the phone book. Pressing the ESC key will stop phone book access.*

6.4 Dialling from the Notebook

The notebook function offers an extended, comfortable type of redialing. The phone numbers stored remain available for further calls. 10 register entries (notes) are provided for this feature.
(See also "Programming the notebook registers".)

• Phone in idle state.

Mo. 21 Feb 99 17:26

→ • Go to the note book menu. (Function code "170" will be displayed optionally.)

170 note book

OK • Select notebook, 1st entry will be displayed.

note book 1 : 07231396410

← → • SCROLLING
With each keystroke on the arrow keys, you can scroll the entries. If not all notes are occupied, the last entry will be displayed as "new note".

note book 2 : 0711123456

Lifting the handset off hook or pressing the hands free key, the entry will be dialed from the notebook.

OK • Select note.

Note 2 : 0711123456
change

→ • RIGHT arrow to go to the next option. Confirm deletion with OK.

Note 2 : 0711123456
delete

→ • RIGHT arrow to go to the next option.

Note 2 : 0711123456
change

OK Change the entry.

Note 2 : change
2 : 0711123456

The last empty entry will always be offered as "new note" until all records are occupied. During a connection, the phone number of the connected party may be stored in the next free notebook record. An error message "note book full" will be displayed, if all records are occupied.

7 DURING A PHONE CALL

7.1 Hold the line (Broker, Conference)

During a phone call, you can hold your conversation to have another call with a second subscriber. Finishing the latter, you can return to the first connection to continue your conversation.

7.1.1 Establishing a Second Call

• Connection state.

07118398261
connected

R • Press the flash key ("R"). The ongoing call is on hold and you can now establish another call.

Please dial_

⊞ • Dial phone number for 2nd call, the subsciber will be called. If the subscriber does not answer the call or you want to end the second call:

07231396410_
ringing

→ • Press RIGHT arrow. (Function code "400" will be displayed optionally.)

400 disconnected call

OK • The second call will be broken and the first call will be reconnected.

Note : *If the handset is placed ON HOOK during the connection with the second call or you disconnect this call using the hands free key, both communications will be broken.*

7.1.2 Broker

You have established a second call and you want to switch between both calls:

- 2nd call active, 1st call on hold.

07231396410
connected

R2

- Press the flash key "R" followed by "2". Connected to the 1st call.

07118398261
connected

R2

- Press the Flash key "R" followed by "2". Connected to the 2nd call.

07231396410
connected

7.1.3 Party Conference

You may connect yourself and both your calling partners to a 3 party conference:

- 2nd call active, 1st call on hold.

07231396410
connected

➔

- Go to the menu function conference.

OK

- Switch to conference. You can now speak to both calling partners simultaneously.

410 conference

OR

1st call 2nd call

R3

- Press the Flash key "R" followed by "3".

07231396410 + 07118398 >
Conference

The first Caller ID shown is always the call that was active prior to switching to conference.

During a conference, you can activate the following functions, using the menu keys (left and right arrows):

Menu	Function
back to call 1	• The conference situation will be released. • You are again connected to the 1st call. • The 2nd call is placed on hold.
back to call 2	• The conference situation will be released. • You are again connected to the 2nd call. • The 1st call is placed on hold.
disc. call 1	• The conference situation will be released. • The connection with the 1st call will be broken. • You will be connected to the 2nd call.
disc. call 2	• The conference situation will be released. • The connection with the 2nd call will be broken. • You wil be connected to the 1st call.

V.24 port	•	Status information of the data port or to disconnect the data connection. *(only deskmaster 510/520 model)*
AB port	•	Status information of the AB port. *(only deskmaster 520 model)*
	•	All connections will be broken.

7.2 Parking a connection

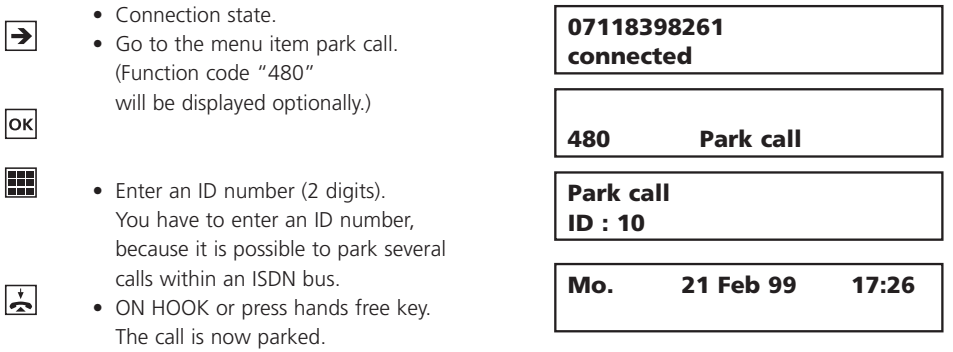
On an ISDN bus, a call can be parked temporarily, in order to:

- Resume the call some time later;
- Resume the call at another phone;
- Unplug the phone to plug it in another wall outlet of the installation.

The parking duration may not exceed 2 minutes.

7.2.1 Parking a Call

- Connection state.
- Go to the menu item park call. (Function code "480" will be displayed optionally.)
- Enter an ID number (2 digits). You have to enter an ID number, because it is possible to park several calls within an ISDN bus.
- ON HOOK or press hands free key. The call is now parked.

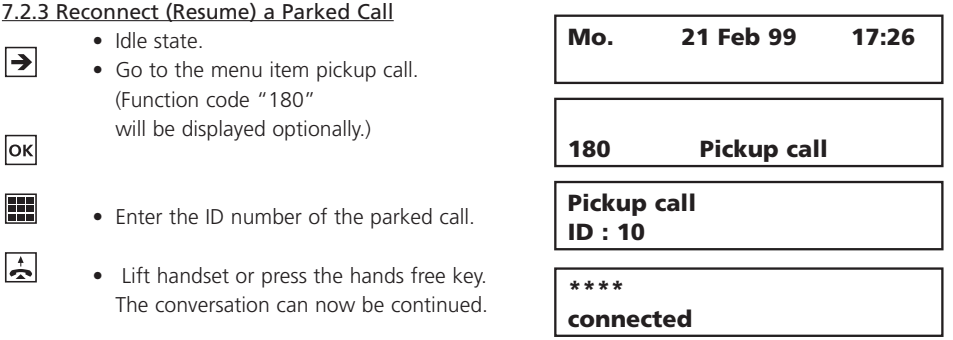


7.2.2 Unplugging the Phone

When a call is parked, it is possible to unplug the line cord and plug it in another ISDN wall outlet. In case of an external connection, the call will continue to be charged!

7.2.3 Reconnect (Resume) a Parked Call

- Idle state.
- Go to the menu item pickup call. (Function code "180" will be displayed optionally.)
- Enter the ID number of the parked call.
- Lift handset or press the hands free key. The conversation can now be continued.



8 INCOMING CALL DURING A CONNECTION

During a call, another incoming call will be indicated by a special ringing tone and a message on the display of the phone.

8.1 A 2nd Incoming Call (Call Waiting)

- Connection state.
- A short ringing tone will indicate another incoming call.
- Requirement:
  The call waiting feature is enabled.

07118398261
connected

07118398261
Camping

You may now activate the following functions, using the RIGHT and LEFT arrow keys below the display:

Menu	Function
Take Call (460)	• The 2nd call will be answered. The first call will be put on hold. You now have the same possibilities as with any 2 call conversation: • Broker function between both partners • 3 party conference
Reject Call (470)	• The 2nd call will be rejected.
Store Note (510)	• The number of the caller will be stored in the notebook (next free entry) for later retrieval. *An error message "notebook full" will be displayed, when all notebook records are occupied.*
Forward Call (500)	• The incoming call will be transferred to another extension.
Identify (120)	• Trace the identity of the caller in the network.
Secret (550)	• Refuse transmission of your caller ID (Calling Line Identifaction Restricted, CLIR) when you answer a call.
Disc. + Answer. (590)	• First call will be disconnected and automatically you will receive second call.
	• The connections will be broken.

9 PERSONAL CONFIGURATIONS

9.1 Call Diversion (Call Forwarding)

You can automatically divert all incoming calls for your phone to another number. The following types of diversions can be enabled and disabled:

- Direct diversion to : Incoming calls will be routed immediately to a programmed destination of your choice.
- Delayed call forwarding : Incoming calls will be diverted to a programmed destination of your choice, if they are not answered within 15 seconds (the delay can be configured in the exchange).
- Call Forwarding on busy : Incoming calls will be diverted to a programmed destination of your choice, if your extension is occupied (busy).

Please note, that Call Forwarding has to be enabled in the ISDN Exchange. In addition, the own MSN number has to be programmed for your phone.
(See section Programming – Programming Multiple Subscriber Numbers (MSN)).

9.1.1 Call Forwarding Enabled/Disabled

- Idle State.
- Go to the menu item diversion. (Function code "220" will be displayed optionally.)

- Select the diversion required, using the arrow keys : diversion to; delayed; on busy

Mo. 21 Feb 99 17:26
220 Diversion
Typ of div. : Diversion to

9.1.2 Enter/Change Call Forwarding Destination

- Enter new destination for diversion.

- Select the right MSN number. This menu is obsolete, if only one MSN has been programmed.

- Display indicates temporarily that the configuration was successful.
- The LED for the "INFO" key will start flashing.

Number to 0711839262
Terminal addr. MSN : 0 ...
Diversion ON
Mo. 21 Feb 99 17:26

9.2 Phone Barring

You can protect your telephone against unauthorised usage by means of 4 different levels of barring outgoing public calls. You can chose between the following barring options:

Total	•	Your phone will be locked for all outgoing calls.
National	•	Only local calls will be allowed.
International	•	Only countrywide calls will be allowed.
Barring OFF	•	There are no restrictions.

Note : *The phone has 3 programmable emergency numbers, which may be dialed at any time and regardless of the set barring options. By default, the emergency numbers 110 and 112 are programmed. The emergency numbers are available from the system parameter menu.*

	• Go to the menu item barring. (Function code "300" will be displayed optionally.)	**300 Barring**
OK	• Select the submenu.	**Barring** **Barring international**
→	• Scroll the menu to go to the required function.	**Barring** **national**
→	• Scroll the menu to go to the required function.	**Barring** **total**
→	• Scroll the menu to go to the required function.	**Barring** **OFF**
OK	• Select the function displayed.	

9.3 Hotline Calls

With the Hotline Call function, the phone will be locked (barred) for all outgoing calls. A programmed number will be dialed, as soon as the handset goes off hook, the hands free key or the OK key is pressed.

The Hotline Call and Call Barring functions are mutually exclusive.

	• Go to the menu item hotline. (Function code "110" will be displayed optionally.)	**Mo. 21 Feb 99 17:26** **ISDN**
OK		
→	• Scroll the menu to switch the function ON or OFF.	**110 Hotline_**
OK	• Select the displayed function.	**Hotline** **ON**
	• Enter the hotline number.	**Number** **12345678**
OK	• Confirm the entry.	
	• The idle display will show the hotline programmed. All other numbers are barred.	**Hotline** **12345678**

Note : *The programmed Hotline function can be switched off from the idle menu by pressing the ESC key. It is necessary to enter the 4 digit password (default: 0000) to gain access to the Hotline menu.*

9.4 Call Log

Incoming calls, which have not been answered, will be recorded in a call log of unanswered calls together with:

- Caller ID;
- Date and Time of the (last) call;
- Number of calls from that subscriber;
- UUS texts (if any).

There are 20 records available for that function. If all records are occupied, the oldest entry will be overwritten. If the same subscriber tried to reach you several times, the display will indicate the number of call attempts, but only the date and time of the most recent call attempt. The call list LED to the left of the display (envelope sign) will start flashing, as soon as an unanswered call has been registered. With subsequent keystrokes on the call list key (left to the keypad, envelope sign), the register entries can be scrolled. If you lift the handset off hook or press the hands free key, the displayed caller ID will be called back. The entry will be deleted from the register automatically, as soon as a connection has been established. The selected entry can be deleted manually using the RIGHT arrow key to go to the delete menu.

- Idle state, the Call List LED flashes.

Mo. 21 Feb 99 17:26

- Scroll the list of unanswered calls.

01 : 09.04. 10:41 3*
07118398262

- Scroll the list of unanswered calls.

02 : 09.04. 11:20 1*
07118398262

- OFF HOOK or press hands free key or OK button to start dialling.

07081556677
ringing

9.5 Displaying the Selected Features

The INFO LED indicates the presence of active phone configurations. The individual functions can be scrolled with the INFO key. The subfunctions related to the main function (e.g. delete, terminate etc.) are available using the RIGHT and LEFT arrow control keys.

Call diversion(s)	• Quiet function ON
Call Waiting enabled	• Caller ID display OFF
Expired alarms/appointments	• UUS Text transmission ON
Call Filter ON	• Hotline ON
Phone Barring ON	• Password protection ON

- Idle state, LED for the INFO key flashes.

Mo. 21 Feb 99 17:26

i • Scroll the list of programmed features.

Diversion (MSN 1) to 07118398262

i • Scroll the list of programmed features.

Call Waiting active (ON)

OK • Select the displayed function.

OK • Switch function OFF.

Call Waiting (OFF)

The programmed feature "Call Waiting" will be disabled.

9.6 Direct Feature Access

As an experienced user of the ISDN phone, you may use the fast access to your frequently used features by entering a 3 digit function code to directly access those features. This is not possible during a connection. (See section "Menu/Function Overview" with a list of function codes.)

↑ • In idle state: press function key.

Function :

⊞ • Enter function code; e.g. "140" for charges.

Function : 140

Note : *The accessible function codes depend on the operation mode of the phone. Some functions may only be valid in certain phone states, e.g. idle state.*

- Display of the selected function.

Last Call
V : 1 D : 0

9.6.1 Disable Function Code Display

The function codes can be displayed optionally. By default, this function is enabled.

↑ • Press function key and select code 257. (As an alternative step through the menu "System Configuration".)

Function : 257

- Display of the selected function.

OK • Display of function codes will be switched OFF.

Numbers in menu (ON)
OFF

10 RINGER CONFIGURATIONS

10.1 Quiet Function (do-not-disturb)

The audible ringer will be switched off for all incoming calls. The calls will still be indicated on the display.

10.1.1 Function ON

- Idle state.

- Go to the menu item Quiet. (Function code "230" will be displayed optionally.)

OK

OK

- Quiet is now active.

Mo.	21 Feb 99	17:26

230	Quiet

Quiet (OFF) ON

Mo.	21 Feb 99	17:26

10.1.2 Function OFF

i

- LED for the INFO key flashes. Press the INFO key until the function is displayed.

OK

- Select the displayed function (e.g Quiet OFF).
- Quiet is now OFF.

Quiet

10.2 Call Filter

The ringer can be switched ON or OFF for certain calls. If you are waiting for an important call, you can define that only this call will be signalled by the ringer. All other calls will only be indicated on the phone display. You can program up to 5 caller IDs for that function. The entry of an incomplete number is possible. That way, you can only enter the first digits of a company phone number, but not the exact extension.

- Idle state.
- Go to the Filter menu (Function code "130" will be displayed optionally.)

OK

Mo.	21 Feb 99	17:26

130 Filter

Filter 131 choice

OK		**Filter** **132 Number**
→	• Select a register (1 of 5) and enter the phone number required.	**Number** **3 :**
		Number **3 : 0123456_**
OK		**Filter** **132 Number**
→		**Filter** **131 selection**

By specifying the filter type, you can define, whether the programmed numbers should be signalled by the audible ringer or not.

The following functions are available:

Menu	Function
Filter Off	• The filtering on barring of caller IDs will be switched OFF.
Filter On	• Only calls of one of the phone numbers programmed will be signalled by an audible alarm. All other calls are only indicated on the phone display.
Filter Barring On	• Calls received from one of the phone numbers programmed will not be signalled by an audible alarm. The call will only be indicated on the display. All other calls will be signalled by an audible alarm.

Note : *The "Quiet" function is also available from the menu structure. This function disables the audible signalling for all calls.*

10.3 Setting Ringing Tone and Volume

You can select the loudness and the melody for incoming calls to the phone. With several phones in one room, the calls can thus be distinguished acoustically. The loudness can be set to increase automatically step by step to the maximum. This function can be disabled.

The following ringing tones can be configured:

- **MSN** : Up to 3 different "Multible Subscriber Numbers" (MSNs) can be configured for your phone. Each can have an individual ringing tone programmed.
  (See also section "Programming MSNs")
- **Special Ringing Tone** : Up to 3 Caller ID's can be programmed to be indicated by a special ringing tone.

10.3.1 Access to Ringing Tone Programming

- Idle state.

- Go to the tone ringer menu (Function code "210" will be displayed optionally.)

OK

- Scroll the available menus to go to the required MSN or the special tone.

- Scroll the available menus to go to the required MSN or the special tone.

OK

- Select the melody with the RIGHT and LEFT arrow keys (7 melodies available).

OK

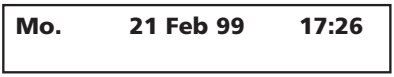
- Select the volume with the RIGHT and LEFT arrow keys (7 volumes available).

OK

- Select the automatic loudness increment with the RIGHT and LEFT arrow keys (ON or OFF).

OK

- Confirm the entry and return to menu level.



10.3.2 Special Ringing Tone

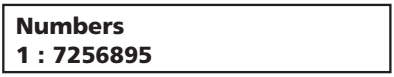
If you are waiting for an important call, which should be distinguished acoustically from other calls, you can define a special ringing tone for that case. You can define 3 Caller IDs with such a special ringing tone.

- Go to the tone ringer menu and select "special ringer".

OK

OK

- Enter phone numbers for the special tones (up to 3). Select the registers with the arrow keys. For the numbers programmed, the tones can be configured as for MSNs above.



→	• Go to the special ringer menu.	**Special ringer** **216 Tone ringer**
OK	• Select the melody with the RIGHT and LEFT arrow keys (7 melodies available).	**Ringer (Special)** **Typ :**
OK	• Select the volume with the RIGHT and LEFT arrow keys (7 volumes available).	**Ringer (Special)** **Volume :**
OK	• Select the automatic loudness increment with the RIGHT and LEFT arrow keys (ON or OFF).	**Ringer (Special)** **Autoincr. : OFF**
OK	• Confirm the entry and return to menu level.	**Special ringer** **216 Tone ringer**

11 APPOINTMENT FUNCTION

The ISDN phone can be programmed for up to 20 alarms/reminders or appointments, which may be executed:

- 1 time;
- Dayly;
- Weekly;
- Monthly.

An appointment can optionally be linked with a phone number to be dialed, when the alarm expires. Expired alarms are indicated on the display in idle state.

11.1 Displaying Appointments

	• Idle State.	**Mo. 21 Feb 99 17:26**
→	• Go to the appointments menu.	**310 appointments**
→	• Go to the special appointments menu.	
OK	• First scheduled appointment will be displayed.	**1 : 12345** **31.12.99 16 : 00 once**
→	• Scroll to next/previous appointments with the arrow key(s).	**2 : 07118398262** **24.03.99 14 : 00 weekly**
OK	• Last entry, if there are still empty registers available.	**3 : New appointments**

11.2 Scheduling a New Appointment

OK • Last Entry.

3 : New appointment

➔ • Go to the required appointment type with the arrow keys: 1time/daily/weekly/monthly

Type :
1 time

OK • Enter date/time. The actual date is preselected and can be changed using the arrow keys and the keypad.

Date/time
24.03.99 14 : 00

OK • Enter the phone number related to the appointment.

Number :
34567

OK • The appointment is now stored.

11.3 Changing or Deleting an Appointment

Select a programmed appointment from the list.

➔ • Scroll the appointment list with the arrow keys.

1 : 071183987262
24.03.99 14 : 00 once

OK

Appointment 1
modify

➔

Appointment 1
delete

➔

OK

Appointment 1
modify

The OK key will either delete the selected appointment or enter the menu to modify an appointment. The procedure to change an existing appointment is equivalent to the new entry of an appointment, except for the preselected date and time, which will be the scheduled date instead of the actual date.

11.4 Expiry of an Appointment

At the time of a programmed appointment, an audible alarm will go off and the appoint

• Appointment expired : audible alarm

Appointment 1 : 12345

➔ • To reschedule the appointment by 1 minute. Confirm with OK.

Appointment 1 : 12345
In 1 Minute

→ • Appointment will be rescheduled by 5 minutes, confirm with OK.

Appointment 1 : 12345
In 5 Minutes

→ • The appointment entry may be changed, confirm with OK. (see "Changing or Deleting an Appointment")

Appointment 1 : 12345
modify

→ • The appointment entry may be deleted, confirm with OK. (See "Changing or Deleting an Appointment")

Appointment 1 : 12345
delete

ESC • Appointment expired: audible alarm.

Appointment 1 : 12345

Lifting the handset off hook or pressing the hands free key, the entry linked to the appointment will be dialed. A 1 time appointment will be deleted from the list, a repeated appointment will be rescheduled to the following date.

12 Displaying Call Charges

12.1 Review the Stored Charge Information

→ • Go to the call charges menu. (Function code "140" will be displayed optionally.)

140 Call charges

OK

Last call
V : 2 D : 0

→ • Charges of the last call (V = voice call, D = data call).

→ • Total charges registered (V = voice call, D = data call).

Charge sum
V : 122 D : 98

In the "system param. > charges" menu you can change the display of "units" from the example above to the "amount of the call charges" (units multiplied by a programmable currency factor).

12.2 Call Charge Display During a Connection

• Connected state.

Charge Units

07118398261
connected 3

12.3 Call Charge Display at the End of a Connection

• Idle state following a connection: temporary display of charges (units selected).

Mo. 21 Feb 99 17:26
Charge : 3

13 PROGRAMMIING & CONFIGURATIONS

13.1 Alphanumeric characters

To enter a name into the telephone book, using the keypad of the ISDN telephone, each numeric key has some alphanumeric characters:

Key	1 x	2 x	3 x	4 x	5 x	6 x	7 x	8 x	9 x	10 x	11 x	12 x	13 x	14 x
1		,		-	?	!	,	.	:	"	'	(	)	1
2	A	B	C	Å	Ä	Æ	À	Á	Â	Ã	Ç	2		
3	D	E	F	D	È	É	Ê	Ë	3					
4	G	H	I	Ì	Í	Ï	4							
5	J	K	L	5										
6	M	N	O	ñ	Ö	Ø	Ò	Ó	Ô	Õ	6			
7	P	Q	R	S	Þ	ß	7							
8	T	U	V	Ü	Ù	Ú	Û	8						
9	W	X	Y	Z	9									
0	0	+	&	@	/	$	%	£						
*****	*													
#	#													

To enter a character, press the numeric key a number of times. For example to enter letter H, press '4' key 2 times.

13.2 Programming the Phone book

13.2.1 New Phone Book Entry

For a new entry, a name has to be entered, followed by the corresponding phone number. The dialling keypad is used for the entry. The alphanumeric characters printed below the dialling button (up to 3) are selected by pressing that key repeatedly with short intervals. Example: L = 3 x button 5, R= 2 x button 7, A=1 x button 2, etc. A wrong entry can be corrected using the LEFT arrow key ( ).

- Idle state.

Mo. 21 Feb 99 17:26

- Go to the menu item to program the phone book.

280 prg. tel. book

Prg. tel. book
281 delete entry

Prg. tel. book
282 modify entry

- Go to new entry.

Prg. tel. book
283 new entry

- Enter the name of the subscriber using the dialling keypad.

Name :
Topcok

- Correct wrong character.

Name :
Topco

- Enter correct character (entry: M = 1 x key 6).

Name :
Topcom

- Enter corresponding number.

Number
072313964

- The entry is stored.

Note : *In the Deskmaster 510i and 520i with built-in V.24 port, the phone book can simply be loaded from the PC database using the optional PC CTI software for the Deskmaster.*

13.2.2 Modifying a Phone Book Entry

- Go to the prg. tel. book menu as described above.

Prg. tel. book
281 delete entry

- Go to the menu item modify entry.

Prg. tel. book
282 modify entry

- The first available entry from the phone book will be displayed. Scroll to the entry to be changed using the arrow keys or by entering the name using the dialling keypad. (See section "Dialling from Phone Book")

A_Company
0723198765

- Select the required entry.

Topcom
07231396410

- Change the name of the subscriber.

Name :
Topcom

- Change the number of the subscriber.

Number
03099887766

- The entry will be stored.

13.2.3 Deleting a Phone Book Entry

- Go to the prg. tel. book menu as described above.

Prg. tel. book
281 delete entry

OK

- The first available entry from the phone book will be displayed. Scroll to the entry to be deleted, using the arrow keys or by entering the name using the dialling keypad. (See section "Dialling from the Phone Book")

A_Company
0723198765

- Select the required entry.

Topcom
01256985

OK

- The selected entry will be deleted.

13.3 Programming the Notebook Record(s) during a call

Up to 10 Caller ID's can be entered in the notebook register.

13.3.1 Storing a New Note

- Outgoing or incoming call.

07118398261
ringing

- Or conversation state.

07118398261
connected

➔

- Go to the store note menu.

Note : *The menu will already be displayed during call setup (Display 1 above).*

510 Store note

OK

- The next free entry in the note register will be offered for storage. The entry can still be edited prior to storing it to the note register.

Note : *If all available records are occupied, a warning will be displayed.*

Notebook
04 : 07118398261

OK

- The entry will be stored to notebook record 4.

13.3.2 Modifying and Deleting Notes

Notes can be edited or created in idle state of the phone. If not all records are occupied, the last entry will be displayed as "new note". After pressing the OK key, you can enter a new note.
See also section "Dialling from the Notebook" for the procedures to modify and delete entries.

13.4 Programming Password Protection

The ISDN Deskmaster contains a password function which allows access to several features of the phone after entry of a user programmable password. With password protection enabled, the operator will be prompted to enter a four digit password. The following functions can be protected with the entry of a password:

Telephone book	•	Notebook
Call diversion (Call forwarding)	•	Charges
Quiet function (Do-no-disturb)	•	Call waiting function
Caller ID display	•	V.24 menu
Phone book programming		
Appointment function	•	Password protection
Call filter/barring	•	Hotline call programming
Phone lock	•	MSN programming (Voice/Data)
INFO key	•	Call register key

13.4.1 Password Protection ON/OFF

- In idle state go to the password menu.

190 Password

OK • Select the entry.

Password
192 modify

➔ • Go to the next entry.

Password
191 protection

OK • Confirm.

Protection (OFF)
ON

OK • Protection will be switched ON (or OFF, depending on previous state.)

Password
191 protection

13.4.2 Modifying Password

OK • Select the password menu.

Password
192 modify

▦ • Enter old password. The "*" character will be displayed instead of the digits entered. In case of a wrong password, an error message will be displayed.

Password : ****_

▦ • Enter new password. Use the LEFT arrow key to delete the digits and enter new ones from the dialling keypad.

modify password
Password : 0000

OK • The new password will be stored. The default password is „**0000**". ***IMPORTANT NOTE : REMEMBER YOUR PASSWORD !***

13.5 Programming Multiple Subscriber Numbers (MSN)

By programming an MSN number, each phone of the ISDN bus can be directly addressed upon an incoming call. This of course requires that this "dial-in" number is known to the caller. If no MSN has been programmed, the ISDN phone will accept all calls to the ISDN bus. With MSN's programmed, the phone will only react to calls received with one of the MSNs programmed. The Deskmaster 510i supports 3 MSNs for voice calls and a fourth one for data calls. The Deskmaster 520i has an additional MSN number for the analog port. To the MSNs for voice calls a personalised ringing tone can be assigned. Consult your network provider for more MSN numbers on you ISDN line.

13.5.1 MSN for Voice Calls

→	• Go to the system parameter menu.	**250 System param.**
OK		**System param.** **253 charge**
→	• Go to the MSN menu. The menu can be accessed directly using the shortcut ↑ 259.	**259 MSN**
OK	• The first MSN will be displayed. With the LEFT arrow key (←), an existing entry can be deleted.	**MSN : 1 (Voice)** **10**
▦	• Display MSN 2. Enter a new MSN.	
OK	• New or modified MSN will be stored.	**MSN : 2 (Voice)** **11**

13.5.2 MSN for Data Calls

This function is only available on the Deskmaster 510i and 520i.

OK	• Go to the system parameter menu.	**250 System param.**
→	• Go to the MSN menu. The menu can be accessed directly using the shortcut ↑ 259.	**System param.** **253 charge**
OK	• The first MSN will be displayed.	**259 MSN**
3* →	• Select the V.24 MSN.	**MSN : 1 (Voice)**
▦	• Enter a new V.24 MSN	**MSN : 4 (Data)**
OK	• New or modified MSN will be stored.	**MSN : 4 (Data)** **12**

13.6 Programming the prefix

You can program your Deskmaster according your application and country where it is used.

PABX Prefix

If you use the Deskmaster behind a pabx system, the telephone can automatically add the digits for an external line before each incoming number. So you can use the callback function from the unanswered call list.

National prefix

This is the prefix that will be added to incoming national calling numbers. This prefix is also used when selecting 'local barring' to determine if the call is local or national.

International Prefix

This prefix will be added to incoming international calling numbers. This prefix is also used when selecting 'national barring' to determine if the call is national or international.

→	• Select the system. parameter menu	**250 System param.**
OK	• Press OK to select	**System param.** **253 charge**
→	• Select the prefix/region.menu	**System param.** **258 Prefix / Region**
OK	• Press OK to select	**PABX prefix**
← →	• SCROLLING : You can now select the different prefix settings	**National** **0**
← →	• SCROLLING : You can now select the different prefix settings	**International** **00**
OK	• Press OK to set or change the prefix.	**PABX prefix** **0**
OK	• Press OK to confirm or use ← to delete.	**PABX prefix** **0**

13.7 Telephone reset

It is always possible to reset your unit back to the default settings and clear all memories.

→	• select the system parametermenu
OK	• Select the reset menu. The menu can be directly accessed using the shortcut ↑ 264
→	• Confirm to enter.
OK	• Press OK to reset the unit
OK	• The unit will restart.

250 System param.

System param.
253 charge

264 Reset

Reset
Are you sure ?

EEPROM Reset
Please wait..._

Mo. 21 Feb 99 17:26
Topcom

Note : *All settings and memories will be deleted when doing reset.*

13.8 Caller ID Display Configuration (number, name, OFF)

The ISDN phone provides the feature to configure the caller ID display to the user's needs:

- Display of caller ID number (default).
- Display of subscriber name. The phone book will be searched for the phone number and the corresponding name will be displayed, if available.
- Caller ID OFF.

In case of caller ID display switched off, no transmitted nor received subscriber numbers will be displayed. The caller ID display can only be programmed in idle state of the phone.

	• Idle state.
→	• Go to the number display menu.
OK	• Select the menu.
OK	
→	• Select the function or go to the next item.
OK	
→	• Select the function or go to the next item.
OK	• The selected mode will be stored.

If number display is switched off, the number of incoming as well as outgoing calls will be represented with "x".

Mo. 21 Feb 99 17:26

200 Number display

Number display
Display : Name

Number display
Display : Number

Number display
Display : OFF

xxxxxxxxxx
connected

13.9 User to User Signalling (UUS)

The ISDN phone can be programmed to automatically release a preprogrammed text message on outgoing calls. This function allows you to send a short message to a phone without establishing a connection. There are 5 fixed, standard texts and 1 user programmable text available.

13.9.1 Programming UUS Messages

- Idle state.

➔ • Go to the UUS text menu.

Mo. 21 Feb 99 17:26 **ISDN**

OK • Select the menu.
• Select the UUS text selection

320 UUS Text

OK • Select the function or go the next item. With OK, a previously selected UUS text will be turned off.

UUS Text **321 OFF**

➔ • Scroll through the available texts with the LEFT and RIGHT arrow keys. Select the required text with OK.

UUS Text **322 UUS select text**

OK • Scroll through the available texts with the LEFT and RIGHT arrow keys. Select the required text with OK.

1 : please call back

OR • Select the required text with OK. The selected UUS-Text is activated

2 : please call back tomorrow

OK • Enter your own text using the keypad.

Mo. 21 Feb 99 17:26 **ISDN**

OK • The selected UUS-Text is automatically activated

6 : User text text?

6 : User text

13.10 Least cost routing (LCR function)

The Deskmaster can dial out special carrier prefix before the number, depending of the dialled number. In this way you can automatically route your calls via the cheapest operator. For using the LCR function you need to first dial the digit and then press speaker key or lift the handset. When you first press speaker key or lift the handset and start dialling, it is impossible for the unit to add prefix number.

The required settings for the LCR function:

- Idle state

Mo. 21 Feb 99 17:26 **ISDN**

➔ • Select the menu entry System parameters

250 System param.

OK

→ • Select the menu item LCR

OK

→ • Select new entry

OK • Input carrier name (max. 8 characters)

⌨ • Enter a carrier name via the keypath

OK

⌨ • Enter the carrier prefix : this is the number that will automatically be added before the tel. Number (max. 8 digits)

OK

⌨ • Enter the prefix : these are the first digit of the number that automatically will use this route. For Example : 00 , in this case all tel. numbers starting with 00 will get prefix 1658

OK • Enter the next prefix for this route. You can enter up to 20 prefix per route (max. 8 digits)

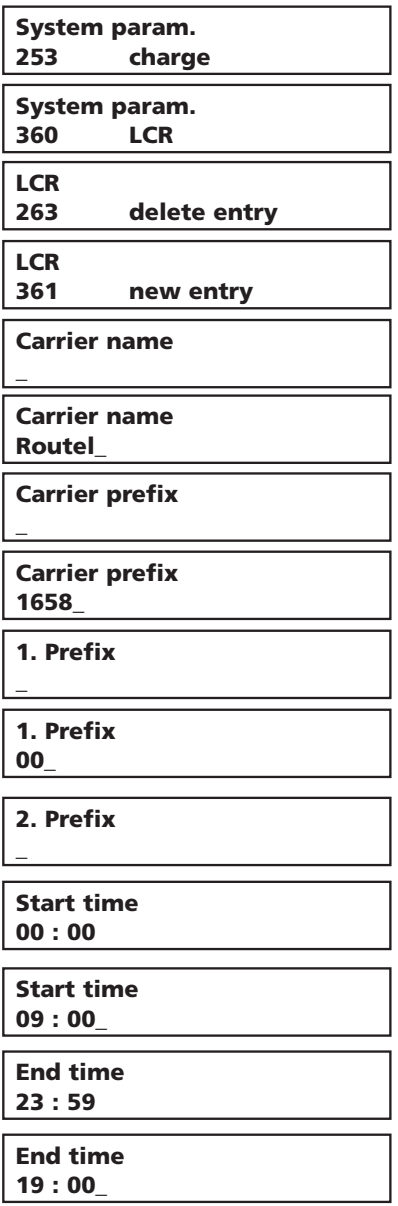
OK

⌨ • You can enter start time for this route (not obligated)

OK

⌨ • You can enter end time for this route (not obligated)

OK



You can program up to 8 different carrier routes.
When you dial a telephone number, the Deskmaster will verify the number (with the programmed prefix) and if required will put automatically the operator prefix before the number. Also with each incoming call, the carrier prefix will be added.

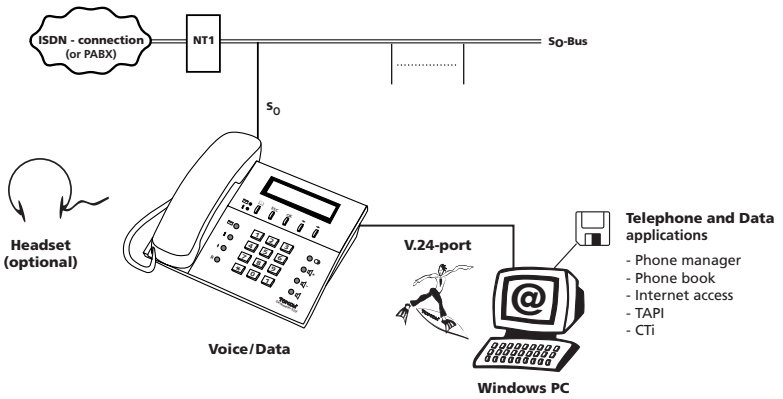
14 DATA INTERFACE

The following functions and PC options are only available on the Deskmaster 510i and 520i.

The configuration V.24 port allows direct connection to a PC and therefore enables:

- Computer Telephony Integration (CTI);
- Access to On-Line Services and to the Internet or data/file transfer to other subscribers at ISDN speed (64 Kbit/s).

14.1 Configuration Overview



14.2 Establishing Internet connection (WIN95®; WIN98®; WIN NT®)

14.2.1 Installing Modem driver into WINDOWS

CD-Version 2.1

- Go to "My computer", "Control panel".
- Select "Modems" option.
- Select "Add" option.
- Select "Don't detect" option.
- Select "Have disk" option.
- Enter path <CD-Drive> : \ (e.g.: D:\ ).
- Select the required modem type (depending on internet provider) PPP, HDLC or X75 modem.
- Choose the right COMM port (usually COM2).
- Select "Finish" option.
- Mediatec iPhone is now installed as a modem in your system.

CD-Version 2.2

- Insert CD.
- Go to the second screen.
- Select 'Install modem drivers'.
- Follow the instructions.

14.2.2 Setting Dial-Up Network

- Go to "My computer".
- Select "Control panel" option.
- Select "Add/remove Software" option.
- Select "Windows setup".
- Select "Communication" option.
- Select "Details".
- Mark "Dial-up network" item. In case this item is already marked, go to "Setting Internet Protocol".
- Select "OK". (The installation of the Dial-Up Network adapter will be finished)
- To the question "Restart computer" you answer "No".

14.2.3 Setting Internet Protocol

- Go to "My computer".
- Select "Control panel" option.
- Select "Network" option.
- Select "Add" option.
- Select "Protocol" option.
- Go to Microsoft and select "TCP/IP protocol".
- Press "OK".
- Press "OK". (The TCP/IP protocol will be installed.)
- To the question "Restart computer" you answer "Yes".

14.2.4 Establishing Connection with Internet Provider via Dial-Up Network

- Go to "My computer".
- Select "Control panel" option.
- Select "Dial-up network" option.
- Select "Make new connection".
- Enter a suitable name for dial-up networking.
- Select Mediatec iPhone modem.
- Select "Configure" option in "Select a modem" field.
- Set the right COM port and speed (minimum 64.000 bits/s).
- Select "OK" option.
- Select "Next" option.
- Enter the telephone number with prefix of the Internet Provider (see Internet Provider).
- Select "Finish" (for Windows 98) **OR** Select "Server type" (for Windows 95).

Windows 95®

- Select "Server type" (see Internet Provider).
- Select "TCP/IP settings" and fill in the correct data (see Internet Provider).
- Select "OK".

Windows 98®

- Select "OK".
- Go to the just made Dial-Up Network Connection.

- Press the right mouse button.
- Select "Properties" option.
- Select "Server type" (see Internet Provider).
- Select "TCP/IP settings" and fill in the right data (see Internet Provider).
- Select "OK".

The Internet connection is now established and all settings are finished.

14.3 CTI Software Installation

CD-Version 2.1

To install the basic Deskmaster PC software on your PC, please proceed as follows:

- Insert the CD with the Deskmaster software into your CD drive.
- If the setup program does not start automatically, click on Start in the Taskbar and then Run. Select <CD-DRIVE>\CTI\setup.exe
- The setup program will be started. Please follow the on-screen instructions and enter the data requested.
- Restart the computer, if the program prompts you to do so.

CD-Version 2.2

To install the Deskmaster CTI, please proceed as follows:

- Insert CD with Deskmaster software into the CD-Drive.
- Go to the second screen.
- Select 'Install Deskmaster CTI'.
- The setup program will be started, please follow the on-screen instructions and enter the data when requested.
- Restart the computer, if the program prompts you to do so.

14.4 PC Telephony with the Deskmaster PC Software

After the installation of the Deskmaster PC Software, you will find a new program group "Topcom Telephony". You can start the application by clicking on Start in the Taskbar and then selecting **Programs –> Topcom Telephony –> Deskmaster.** You will see a Telephone user interface, similiar to your phone, appearing on your PC screen. This CTI application offers several comfortable facilities to control and administrate telephone traffic from the PC screen. A CD-rom with a basic CTI application is included. It offers an elaborate range of possibilities, described in the following pages. Ask you dealer for more information.

14.4.1 Functions of the Deskmaster PC Application

Phone book/ Address Database	Database entries mapped on direct dialling keys. Configurable address/phone book database. Additional phone books can be created or existing ones can be linked (e.g. from a LAN). Up to 100 entries can be downloaded into the Deskmaster.
Communication Journal	Registration of: Call status, call type, incoming/outgoing calls, calling partners' numbers/names, duration, charges, notes associated to the phone call. Several filter/sort/search criteria.

Dialling from the PC	Direct dialling from journal, phone books, etc.
Caller Identification (ISDN calls)	Automatically generate notes on incoming and outgoing calls with date/time stamp and caller information from the internal database.
Group Listening Hands Free Call Diversions	With the ISDN phone controlled from the PC screen, the hands free facility is automatically switched on at call establishment. Diversion of the calls addressed at your phone to another subscriber or extension.
Call Hold (Broker, Conference)	During a conversation, you can put your call on hold to start a second call with another subscriber. You can then switch between both calls or establish a 3 party conference.

14.5 Data Access with Modem Commands

The Deskmaster may be controlled with AT commands, similiar to an analog modem. This may control call setup and also data/file transfers with a variety of standard PC programs (such as HyperTerminal, provided with Windows). Except for the commands "A/" and the Escape sequence "+++", all commands will start with the characters AT. The command A/ may be used to repeat the last command. The maximum length of a command line contains 40 characters, including the line separators (CR/LF). An invalid character in a command line will be ignored.

Several AT commands may be transmitted within one command line :

- ATZX1D1234<CR>

has the same effect as

- ATZ<CR>
- ATX1<CR>
- ATD1234<CR>

The AT command set of the Deskmaster has been extended by some commands. This is mainly applicable for voice functions.The Deskmaster will respond to most commands with a result code.
(See Appendix for a list of supported commands.)

15 DESKMASTER 520I ANALOG INTERFACE

The following functions are only available on the Deskmaster 520i.
The configuration with integrated analog interface allows additional connection of an analog terminal after the ISDN phone, such as:

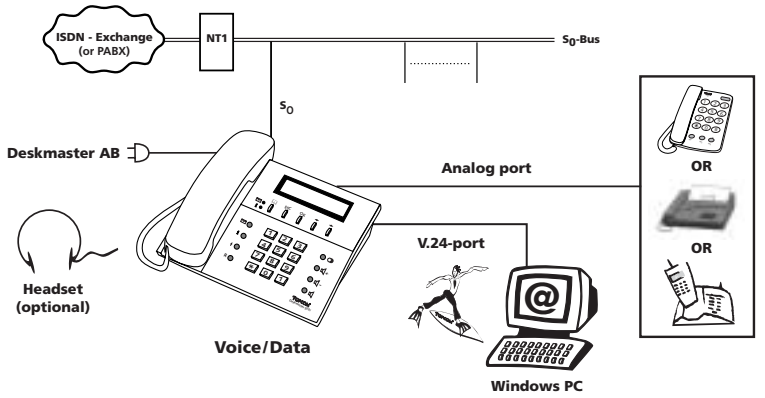
- Analog phone;
- G3 fax;
- Cordless telephone.

- The Deskmaster with analog interface comes with an external plug. This terminal is not fed by the communication network and therefore it is not suitable for emergency operations. Apart from that, the phone offers the same functionality as the Deskmaster 500i and the Deskmaster 510i.
- Note that only 2 communication channels are available at the same time. This implies that a third extension will be in a busy condition, when already 2 channels are in use (e.g. in case of a voice call from the ISDN phone and an active fax connection, an attempt to establish an additional data call may be rejected).

- The analog port can have its own MSN number, which should be programmed as described in the sections before. If this MSN has not been set, the analog port will react to all incoming calls (as the ISDN phone would).

Note : *The analog extension is fed by the Deskmaster 520i. If you connect more extension in parallel, certain extensions might not operate correctly. Therefore it is recommended to connect maximum 2 extensions to the analog port.*

15.1 Configuration Overview



15.2 Transfer call from ISDN phone to analogue phone

An incoming or outgoing connected call on the ISDN phone can be transferred to the analogue port.

- During connection

00325698855
connected

- Select the menu entry Transfer to AB
  The analogue phone will start ringing.
  Lift the handset and you will be connected with the external line.

580	**transfer to AB**

Mo.	**4 April 99**	**09: 00**
ISDN		

15.3 Keypad commands on analogue port

To activate network features like call diversion (CFU, CFB, CFNR) from the analogue port, you can use D-channel command (keypad). If you start dialling out from the analogue telephone and start with * or #, the Deskmaster will automatically send it as D-channel commands (keypad). For example to activate Call Forwarding Unconditional (CFU) from the analogue telephone, lift the handset and dial * 21 * 123456 (Tel number) #.

Note : *When you have programmed MSN number for the ab port, the analogue telephone will use this MSN number to dial out and also the network features you activate or deactivate will be for this MSN number. If you don't have entered any MSN number for the ab port into the Deskmaster, the analogue phone will use MSN 1.*

15.4 Flash commands on analogue port

When you have an analogue telephone with Flash key, you can handle two calls at the same time on the analogue port. Use following commands: (R = flash key)

Command	Function	State
R	To hold active line	1 connected call
R	To answer second incoming call	1 connected call, second call knocking
R1	Finish active call and resume first call	1 connected call, 1 call on hold
R2	Switch between two calls	1 connected call, 1 call on hold
R3	3 party conference	1 connected call, 1 call on hold
R4	ECT : external call transfer	1 connected call, 1 call on hold

Note : *The flash key is a short on-hook signal. The length can vary with the phone you use. We recommend having flash key between 100 and 380 ms.*

15.5 MSN for the Analog Port

→	• Go to the system parameter menu.	**250 System param.**
OK		**System param.** **253 charge**
→	• Go to the MSN menu. The menu can be accessed directly using the shortcut ↑ 259.	**System param.** **259 MSN**
OK	• The first MSN will be displayed.	**MSN : 1 (Voice)**
4* →	• Select the analog port MSN.	**MSN : 5 (AB)**
OK		**MSN : 5 (AB)** **23645_**
▦	• Enter a new AB MSN.	
OK	• New or modified MSN will be stored.	

15.6 Selection the ISDN call type on the analogue extension (520 model only)

When dialling out from the analogue phone connected to the Deskmaster 520, it will use the ISDN type '3.1 k telephony' to indicate the call is coming from an analogue extension. If you call up another ISDN equipment, you can only get connection if the other end accepts this type of call. If you connect fax or other equipment to the analogue port of the Deskmaster 520, you can change the ISDN type.

• Idle state	**Fri. 21 Feb 99 17: 26** **ISDN**

→	• Select the menu entry to AB port	**350 AB port**
OK		**AB port** **341 settings**
OK		**Settings** **340 service**
→	• Select the required service type	**Service (Tel_speech)** **Tel_speech**
→	• Select the required service type	**Service (Tel_speech)** **Tel_Audio 3.1kHz**
→	• Select the required service type	**Service (Tel_speech)** **Fax**
→	• Select the required service type	
OK	To set the analogue device as fax Gr2/Gr3 select 'fax'.	**Service (Tel_speech)** **Unspecified**

IMPORTANT : *Changing the type of call of the analogue device can make it impossible to call certain numbers. Normally it should be set to 'Tel_speech' for a normal telephone or 'Fax' for analogue fax device.*

16 TROUBLESHOOTER

Symptom	Cause
No function	• Mains failure. Check if the power supply (220V) of your NT1 box is connected. • Error in the line connectors.
No display	• NT1 box in emergency mode operation (mains failure).
No ringing	• "Quiet" or "Call Filter" programmed.
An available function cannot be used	• Repeat the entry, possibly operational malfunction. • Feature is not enabled by the ISDN provider. Consult your provider.
Your partner cannot hear you	• The Mute function is switched ON (key during connection).
No calling partner number display	• Call is not originated from an ISDN access. • Calling partner number suppression is switched ON.
No new connection at "Call pickup"	• Allowed time expired. • Wrong connection code entered at pickup attempt.
The phone displays an error message such as <01> wrong MSN	• The number in brackets is a cause number according to the ISDN protocol specification in Q.931, given as hexadecimal value. In some cases, this may be caused by an ISDN feature not yet available in the exchange or a network feature not yet available in the phone. This may be the case if the phone is connected to a PABX with different feature sets. Contact your supplier about the cause number or see the cause list appended.

17 APPENDIX

17.1 Modem Commands (AT Commands)

17.1.1 Basic Commands	
A	Answer Mode
Bn	Select Baud rate(s) B0 1200 bps B4 19200 bps B1 2400 bps B5 38400 bps B2 4800 bps B6 57600 bps B3 9600 bps B7 115200 bps (default)
D<nb>	Dial number <nb>
En	Echo Commands E0 echo off E1 echo on (default)
Fn	Protocol Selection F1 X.75 (mailbox) F3 PPP (async -> sync) F2 transparent HDLC
Hn	Hang up (n will be ignored)
In	Product Information I0 Product Code (“Deskmaster”) I1 Revision Code
On	Switch to On-line Datamode (n will be ignored)
Qx	Send Result Codes Q0 yes (Default) Q1 no
Sn	Read-/Write Register Sn? Read Register n Sn=x Write x to Register n
Vn	Character or Digit format for the V0 Digit Format V1 Character Format (Default)
Wn	CONNECT Messages
Xn	Selection of the Result Codes
Zn	Reset Deskmaster Configuration Z0 profile 0 Z1 profile 1

17.1.2 “&” Commands	
&F	Load factory defaults
&Kn	Flow Control
&Rn	RTS Option (not used)

&Tn	Test Modus 0 TerminateTest 1 loop back test
&V	Show actual configuration
&Wn	Store actual configuration 0 store as configuration 0 1 store as configuration 1

17.1.3 "*" Commands (Special Deskmaster Control Commands)

*A	Answer voice call (Off Hook)
*D<nb>	Dial voice call
*Hn	Hook 0 ON Hook 1 OFF Hook
*Vn	Voice Support 0 Voice Support disabled 1 Voice Support enabled 2 ATD/ATH commands mapped on voice calls
*Bn	Dial digits 30 – 39 "0" – "9" 61 – 64 "a" – "d" "0" – "9" 48 – 57 "a" – "d" 97 – 100

17.2 Result codes

17.2.1 Data Codes

Number	String	Number	String
0	OK	10	CONNECT 2400
1	CONNECT	11	CONNECT 4800
2	RING	12	CONNECT 9600
3	NO CARRIER	13	CONNECT 7200
4	ERROR	14	CONNECT 12000
5	CONNECT 1200	15	CONNECT 4400
6	NO DIAL TONE	16	CONNECT 19200
7	BUSY	17	CONNECT 38400
8	NO ANSWER	18	CONNECT 57600
9	CONNECT 600	19	CONNECT 115200

17.2.2 Voice Codes

<cr> Call reference
<nb> ISDN number
<ch> Charging info

Number	String
0	OK
1	CONNECT/<cr>/<nb>
2	RING/<cr>/<nb>
3	DISC/<cr>/<nb>/<ch>
4	ERROR
5	
6	NO DIAL TONE/<cr>/<nb>
7	BUSY/<cr>/<nb>
8	NO ANSWER/<cr>/<nb>

17.2.3 Register

0	Number of rings before call is answered 0 no automatic answer (default) 1-127 numer of rings
1	Inactivity Timer (default = 0, no timer)
2	Escape character (default: "+", 127 = none)
3	Carriage Return Character (default: 13)
4	Line Feed Character (default: 10)
5	Backspace Character (default: 8)
6	X-ON Character (default = 17)
7	X-OFF Character (default = 19)
8	Guard time in 1/50s, default is 50 (1s)
9	Bit Option 0-2 B (Baud rate, d = 6) 3 E (Echo, d = 1) 4-7 F (Protocol, d = 0) default = 14 (0x0E)
10	Bit Option 0 Q (result codes, d = 0) 1 V (word/digit result, d = 1) 2,3 W (CONNECT messages, d = 0) 4-6 X (response codes, d = 0) 7 reserved default: 02 (0 x 02)

11	Bit Option 0-2 &K (flow control, d = 0) 3 &R (RTS option, d = 0) 4-7 reserved default: 00 (0 x 00)
12	reserved

17.2.4 External Interfaces (Microsoft TAPI)

The Deskmaster 510i and 520i provides a TSPI driver for the Microsoft Telephone Application Programming Interface (TAPI). All ISDN phone functions may be controlled through that interface.

18 ERROR MESSAGES/CAUSES

Deskmaster Cause (HEX)	Q.931 Spec. Cause (DEC)	Cause description
1	1	Unallocated (unassigned) number
2	2	No route to specific transit network
3	3	No route to destination
6	6	Channel unacceptable
7	7	Call awarded and being delivered in an established channel
10	16	Normal call clearing
11	17	User busy
12	18	No user responding
13	19	No answer from user (user alerted)
15	21	Call rejected
16	22	Number changed
1A	26	Non-selected user clearing
1B	27	Destination out of order
1C	28	Invalid number format
1D	29	Facility rejected
1E	30	Response to STATUS ENQUIRY
1F	31	Normal, unspecified
22	34	No circuit/channel available
26	38	Network out of order
29	41	Temporary failure
2A	42	Switching equipment congestion
2B	43	Access information discarded
2C	44	Requested circuit/channel not available
2F	47	Resources unavailable, unspecified

31	49	Quality of service unavailable
32	50	Requested facility not subscribed
39	57	Bearer capability not authorized
3A	58	Bearer capability not presently available
3F	63	Service or option not available, unspecified
41	65	Bearer capability not implemented
42	66	Channel type not implemented
45	69	Requested facility not implemented
46	70	Only restricted digital information bearer capability is available
4F	79	Service or option not implemented, unspecified
51	81	Invalid call reference value
52	82	Identified channel does not exist
53	83	A suspended call exists, but this call identity does not
54	84	Call identity in use
55	85	No call suspended
56	86	Call having the requested call identity has been cleared
58	88	Incompatible destination
5B	91	Invalid transit network selection
5F	95	Invalid message, unspecified
60	96	Mandatory information element is missing
61	97	Message type non-existent or not implemented
62	98	Message not compatible with call state or message type non-existent or not implemented
63	99	Information element non-existent or not implemented
64	100	Invalid information element contents
65	101	Message not compatible with call state
66	102	Recovery on timer expiry
6F	111	Protocol error, unspecified
7F	127	Interworking, unspecified

19 QUICK OPERATION GUIDE

Feature	Operation	Remarks
Outgoing Call		For hands free operation, press instead of lifting handset.
Incoming Call		
Redial (last number)		
Dial from Phone Book		Search entry by typing characters from dial keypad.
Check Unanswered Calls		Press unanswered call list key to scroll through list, lift handset to dial.
Select Feature by Menu		Select the function displayed with OK.
Select Feature by Function Code		Enter 3 digit code.
Search Feature by Name		
Hold Call, Dial 2nd Call		Toggle between calls (broker) or select conference from menu.

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